

What is Claimed is:

1. A method of assessing a user's health comprising the computer implemented
5 steps of:
 measuring an amount of a first analyte in a biological fluid sample reflecting
 body fat metabolism and an amount of a second analyte in the biological fluid sample
 reflecting glucose metabolism, and
 assessing the health of the user based on the amount of the first analyte and the
 10 amount of the second analyte.
2. The method of claim 1, further comprising the step of formulating advice to
 the user based on the step of assessing.
- 15 3. The method of claim 2, further comprising the step of using the formulated
 advice to drive a closed loop system for insulin dosage.
4. The method of claim 1, further comprising calculating and providing a dose
 for a medication based on the step of assessing.
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5. The method of claim 1, wherein the step of assessing the health comprises
 assessing a metabolic syndrome, and further comprising the step of calculating a
 therapeutic intervention for the metabolic syndrome.
- 25 6. The method of claim 1, wherein the step of assessing the health of the user
 comprises calculating an insulin sensitivity factor based on the amount of the first
 analyte and the amount of the second analyte in the biological fluid sample.
7. The method of claim 1, wherein the first analyte comprises at least one fat
 30 metabolism analyte.
8. The method of claims 1 wherein the sample comprises one of blood, a derivate
 of blood, interstitial fluid, urine, saliva and mixtures thereof.

9. The method of claim 1 wherein the step of assessing comprises predicting the likelihood of the user developing hypoglycemia or hyperglycemia.
10. The method of claim 1, wherein the step of assessing comprises utilizing a
5 third parameter comprising one or more of: body mass Index, gender, body composition, meal intake, insulin delivery, medication and weight to assess the health of the user.
11. The method of claim 2, wherein the advice takes the form of a glucose level
10 prediction for a future period.
12. A health-monitoring device for running the computer implemented steps of claim 1.
13. A health-monitoring device for assessing a user's health, comprising:
15 a sampling device for providing a biological fluid sample from the user; and one or more test elements for measuring an amount of a first analyte in the biological fluid sample reflecting body fat metabolism and an amount of a second analyte in the biological fluid sample reflecting glucose metabolism.
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14. The device of claim 12, further comprising a program for assessing a parameter indicative of the user's health based on the amount of the first analyte and the amount of the second analyte in the sample.
15. The device of claim 13, wherein the parameter is an insulin sensitivity factor.
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16. The device of claim 13, wherein the parameter is hypoglycemia.
17. The device of claim 13, wherein the program formulates a recommendation
30 for therapeutic intervention.
18. The device of claim 16, wherein the therapeutic intervention comprises one of: a dose of insulin, diabetic medication and dietary advice.

19. The device of claim 12, where the test elements comprise one or more of a photometric, reflectometric, electrochemical and fluorescence based system for analyzing the biological fluid sample.
- 5 20. The device of claim 12 where a single test element is able measuring both an amount of a first analyte in the biological fluid sample reflecting body fat metabolism and an amount of a second analyte in the biological fluid sample reflecting glucose metabolism.
- 10 21. The device of claim 12, wherein the device automatically or continuously measures the second analyte.
22. The device of claim 12, wherein the device automatically or continuously measures the first analyte.
- 15 23. The device of claim 12, further comprising a memory element for tracking the evolution of a disease or therapeutic success.
24. A method for monitoring the health of a user, comprising the steps of:
20 measuring a first analyte in a biological fluid sample reflecting body fat metabolism;
determining a glucose level in a biological fluid sample; and
calculating and tracking the evolution of an insulin resistance factor in the user based on the measured level of the first analyte and the glucose level.
- 25 25. The method of claim 22, further comprising the step of predicting the likelihood of a developing hypoglycemia or hyperglycemia.
26. The method of claim 22, wherein the step of calculating and tracking utilizes
30 one or more additional parameters comprising one of: body mass Index, gender, body composition, meal intake, insulin intake, medication and weight.
27. The method of claim 22, wherein the glucose level is determined by measuring an amount of glucose in a biological fluid sample.

28. The method of claim 22, wherein the glucose level is determined by assuming the glucose level to be a normal level.

5 29. A method of monitoring a health parameter in a user, comprising the computer implemented steps of:

measuring an amount of a fat metabolism analyte in a biological fluid sample reflecting body fat metabolism

10 measuring an amount of a glucose metabolism analyte in the biological fluid sample, and

correlating the amount of the fat metabolism analyte and the amount of the glucose metabolism analyte to the health parameter.